In the Claims

Claims 1-42 (CANCELLED)

43. (currently amended) A mammalian adult ~~neuroendocrine stem~~ undifferentiated cell population isolated by digestion of dissociated neural, endocrine or neuroendocrine tissue with a trypsin like enzyme, in combination with a support material for implantation.

44. (previously presented)The undifferentiated cell population of claim 43, wherein the undifferentiated cell population is isolated from adrenal gland or pancreas tissue.

Claims 45-53 (CANCELLED)

54. (previously presented)The undifferentiated cell population of claim 43 isolated by digestion of the tissue with trypsin, washing the cells with buffer and isolation of the cells by centrifugation sufficient to separate the undifferentiated intact cells from the buffer.

55. (previously presented)The undifferentiated cell population of claim 43 isolated from the hypothalamus, pituitary, parathyroid, or thyroid.

56. (previously presented) The undifferentiated cell population of claim 43 isolated from along the intestinal tract or the aorta.

57. (previously presented) The undifferentiated cell population of claim 43 wherein the tissue is digested under conditions equivalent to 0.05% trypsin at 37°C for five minutes

58. (previously presented) The undifferentiated cell population of claim 43 further comprising a hydrogel support structure.

59. (previously presented) The undifferentiated cell population of claim 58 further comprising a structure selected from the group consisting of a coral, hydroxyapatite, metallic, inorganic, ceramic, or polymeric fibers, mesh, struts, or sponge.

60. (previously presented) The undifferentiated cell population of claim 43 further comprising a polymeric support structure.

61. (previously presented) The undifferentiated cell population of claim 43 further comprising a support structure and factors selected from the group consisting of growth factors, nutrients, and drugs.

62. (new) The undifferentiated cell population of claim 58 or 59 for spinal cord repair.